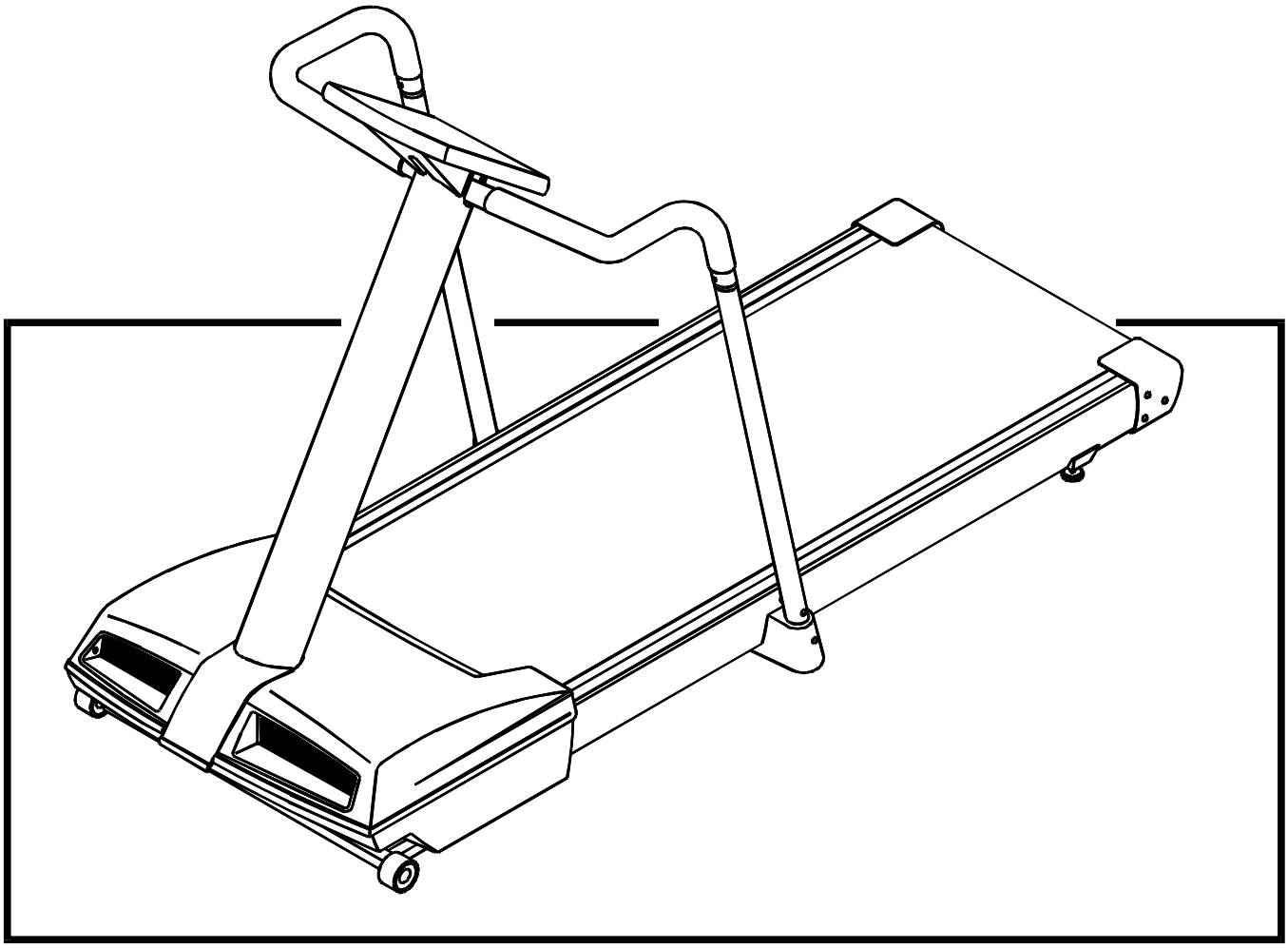
NET PRICE:

LifeFitness

Model 3500 Treadmill



SERVICE MANUAL

After Market Services

FCC Warning - Possible Radio/Television Interference

NOTE: This equipment has been tested and found to comply with the limits pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the space between the equipment and the receiver.
- Connect the equipment to an outlet on a different circuit than that to which the receiver is connected.
- Consult an exercise equipment dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications to this equipment could void your product warranty.

Life Fitness Model 3500 Treadmill

INTRODUCTION

HOW TO USE THIS SERVICE MANUAL

In the unlikely event that an operating problem may occur with your Life Fitness model 3500 aerobic trainer, this Service Manual will instruct and guide you on the quickest, most efficient manner in which to approach the situation. This Service Manual has been separated into a total of Four Sections for quick reference:

- **o** INTRODUCTION
- **o** TABLE OF CONTENTS

Section I

- **o** THEORY OF OPERATION
- **o** TROUBLESHOOTING GUIDES

Section II

- **o** DIAGNOSTIC TESTS

Section III

- **o** MODEL 3500 "How To..." GUIDES

Section IV

- **o** WIRING DIAGRAMS
- **o** PARTS IDENTIFICATION
- **o** COMMUNICATING BY FAX

If an operating problem should arise, turn to the TROUBLESHOOTING GUIDES and attempt to isolate what is causing the malfunction. The GUIDES are listed by symptoms and follow with suggestions as to the most probable cause of the problem.

Once you have pinpointed the source of the problem, turn to the appropriate "How To..." section and review the proper procedures for removing, replacing or adjusting a part. The "How To..." sections are organized by replaceable part (or assembly) name and each page lists the “Tools Required“ to complete that specific function. Refer to Section IV to identify the proper name and number of the part you will now need to order to repair your machine. A form to order by FAX has also been included in Section IV for your convenience.

To order a part, call Life Fitness After Market Services any Monday through Friday from 8:00 AM to 6:00 PM (C.S.T.). When you place a call, in order to speed our response to your particular situation, please have the following information available for the customer service phone technician who will be prepared to assist you:

1. The Treadmill model type (3500)
2. The serial number (Located on the front crossbar between the two wheels)

Serial Number:

3. The symptom of the problem you are experiencing
4. The part name and number you need to order

When you receive your order, review the appropriate "How To..." section and follow the step by step procedures designed to help you install the part quickly and correctly.

If you have any questions or comments please phone, mail, or fax us at one of the numbers listed below.

AFTER MARKET SERVICES
10601 Belmont Avenue, Franklin Park, IL 60131
Phone (800) 351-3737 Toll Free or (708) 451-0036
FAX (800) 216-8893 Toll Free or (708) 288-3702

Life Fitness Model 3500 Treadmill

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THEORY OF OPERATION

*The operational functions of the Life Fitness Model 3500 Treadmill are accomplished by four main components: The **Control Board**, the **Display Console**, the **Drive Motor** and the **Lift Actuator**. The Treadmill user and the Control Board provide input to the Display Console. The Display Console then determines the appropriate action to be taken and passes low level signals to the Control Board. The Control Board converts low level signals to high level signals and forwards them to the Drive Motor and the Lift Actuator to execute the requested command. All of the "Intelligence" within the Treadmill is located in the Display Console*.

Control Board

The Control Board provides power for the Treadmill, acts as an interface between the Display Console, Drive Motor and Lift Actuator, and also acts as an additional interface between the Speed Sensing and Lift Limit Switches. The Drive Motor trigger, Lift Actuator time and direction, and Safety Power Relay Signals are received from the Display Console and routed through the Control Board to execute a command. Speed Sensing and Lift Limit Signals are also passed through the Control Board to the Display Console.

Display Console

The Display Console is the user interface that allows selection from the various programs and options offered by the Treadmill. The Display Console provides all of the "Intelligence" within the Treadmill, controls the Information Displays, and monitors the Keypad and Safety Switches. It determines the Drive Motor and Lift Actuator actions to suit the chosen Life Fitness aerobic training program and it also accommodates the optional Heart Rate Receiver.

Drive Motor

The Drive Motor is the component responsible for moving the Striding Belt. The Speed Sensor, located on the Drive Motor, sends pulses through the Control Board to the Display Console which converts them to the Striding Belt speed. The Display Console adjusts the power to the Drive Motor to maintain a constant speed to the Striding Belt resulting in a more comfortable "feel".

Lift Actuator

The Lift Actuator is the component responsible for raising and lowering the incline level of the Treadmill. The Display Console, through the Control Board, will raise and lower the Lift Actuator for the appropriate amount of time and incline required by a specific command. The "Home" Lift Limit Switch signals the Display Console when the Lift Actuator is at 0% incline. The Lift Actuator also has its own internal built-in Limit Switches.

Symptom: NO POWER

Malfunction	Probable Cause	Corrective Action
No Power	On/off switch	Turn unit On.
	Insufficient power source	Plug treadmill into power source with proper electrical requirements. (See Operation Manual)
	Line cord improperly seated in electrical outlet	Inspect power connection at outlet.
	Damaged line cord	Replace line cord.
	Faulty Display Console	See “Display Console “ symptom.

Symptom: NOISY TREADMILL

Malfunction	Probable Cause	Corrective Action
Rubbing sound from beneath machine	Foreign objects may be stuck under the machine	Inspect underneath Belt and Machine. Remove any debris or accumulation.
Rubbing sound from Striding Belt	Striding Belt not tracking properly	Adjust Striding Belt tracking. See "How To...Adjust and Tension the Striding Belt"
	Striding Belt is rubbing on extrusion or roller pulley	Center Striding Belt. See "How To...Adjust and Tension the Striding Belt"
	Striding Belt is rubbing on belt guide	Center Striding Belt. See "How To...Adjust and Tension the Striding Belt"
Popping sound	Insufficient break-in period	A new Deck and Striding Belt will require a break-in period of approx. 20 hours.
	Wax accumulation on rear roller	Run machine at 4 to 5 MPH to distribute wax onto Striding Belt.
Squeaking noise	Lifesprings may be out of alignment	Reposition the Lifesprings.
	Drive Motor Belt may be worn or damaged	Replace Drive Motor Belt.
	Drive Motor Pulley shifted	Check Drive Motor Pulley to insure Pulley is aligned with Front Roller Pulley. Tighten the Set Screws to secure the Pulley into place.
"Groaning" sound heard from front of machine	Drive Motor Belt over-tensioned	Slacken Drive Belt tension (See "How To...Remove and Replace the Drive Motor Belt")
	Weak Drive Motor/Drive Motor Software	Check Drive Motor Flywheel and Software for compatibility (See Diagnostic Software Version.
	Faulty Drive Motor	Replace Drive Motor
Loud "Groaning" sound heard from front of machine while elevating	Faulty Lift Motor	Perform "Lift Test". (See Diagnostics). Replace faulty Lift Motor.

Symptom: STRIDING BELT

Malfunction	Probable Cause	Corrective Action
Striding Belt will not move	Insufficient power source	Plug treadmill into power source with proper electrical requirements. (See Operation Manual)
	Faulty Control Board	Replace Control Board
Striding Belt hesitates upon start up (or will not begin to turn on new machine)	High amount of friction between Deck and Striding Belt.	Start unit with no one on it at 3.5 mph and 5% or greater incline. Step on to the Belt while it is moving and walk for 4 to 5 minutes.
Maximum speed reduced	Striding Belt, Deck Malfunction • Deck laminate is worn through • Belt worn	Replace Striding Belt and Deck
	Line Voltage too low	Plug the Treadmill into a power source with the proper electrical requirements.
	Striding Belt slips	Adjust Striding Belt Tension (See “How To...”)
	Drive Motor Belt slipping	See “How To...Remove and Replace the Drive Motor Belt” for proper Drive Motor Belt tensioning instructions.
Striding belt comes in contact with End Caps	Unit is not level	Adjust rear leveling legs (See Operation Manual)
	Striding Belt needs to be re-tensioned	Adjust Striding Belt Tension (See “How To...”)
	Missing rubber spacer	Replace rubber spacer between Frame and End Cap
	End Cap(s) distorted	Replace End Cap(s)
	Striding Belt stretched or too long	Replace Deck and Striding Belt

Symptom: UNIT RESETS RANDOMLY

Malfunction	Probable Cause	Corrective Action
Unit Resets Randomly	Insufficient Power Source	Plug Treadmill into power source with proper electrical requirements. (See Operational Manual)
	Damaged Line Cord	Replace Line Cord.
	Line Cord improperly seated in electrical outlet	Secure connection at electrical outlet.
	Low AC line voltage	Too many items tied into AC line. Locate less used circuit line outlet.

Symptom: DISPLAY DOES NOT ILLUMINATE OR RESPOND TO INPUT

Malfunction	Probable Cause	Corrective Action
Display will not illuminate when machine is turned on.	Insufficient power source.	Plug Treadmill into power source with proper electrical requirements. (See Operation Manual)
	Loose connection at Display Console or Control Board.	Secure connections at Display Console and Control Board.
	Faulty Control Board.	With a volt meter check cable voltage at P1 (Console cable) for 8v DC. (pin #2 positive) (pin #8 negative).
	Faulty Display Console.	Replace Display Console.

Symptom: UNIT WILL NOT ELEVATE

Malfunction	Probable Cause	Corrective Action
Unit will not elevate	Line Cord is crossed over lifting assembly	Check position of Line Cord placement.
	Faulty Lift Actuator	Perform Lift Test (See Diagnostics).
	Defective Lift Actuator	Replace Lift Actuator
	Faulty Control Board	Replace Control Board
Unit jammed at top of elevation	Faulty Home Switch	Perform Lift Home Switch Test
	Defective Home Switch	Replace Home Switch
	Faulty Control Board	Replace Control Board

Symptom: ERROR DISPLAY MESSAGES

Malfunction	Probable Cause	Corrective Action
ERROR MESSAGES:		
START (Occurs when the Striding Belt, upon start up, will speed up at a high rate)	Bad connection to Opto Speed Sensor	Check all electrical connections.
	Misaligned or damaged Opto Speed Sensor	Adjust or replace Opto Speed Sensor.
RUN (Occurs at sudden change in Striding Belt Speed)	Moving Striding Belt was suddenly stopped	Reset machine by turning power OFF and ON at ON/OFF switch.
	Bad connection to Opto Speed Sensor	Check all electrical connections.
	Misaligned or damaged Opto Speed Sensor	Adjust or replace Opto Speed Sensor.
BELT (Occurs at interruption in power or when machine is just plugged in))	Spike or interruption in power	Reset machine by turning power OFF and ON at ON/OFF switch.
	Bad connection or damaged Line Cord	Check all electrical connections or replace Line Cord.
	Faulty ON/OFF switch	Replace switch.
	Damaged Motor Controller	Replace Motor Controller.
SPEED (Striding Belt moving faster than commanded)	Faulty Heatsink Control Board	Replace Heatsink Control Board
NO-ZX	Crimped Cable	Replace bad Cables
	Faulty Display Console	Replace Display Console
	Faulty Heatsink Control Board	Replace Heatsink Control Board

Symptom: HEARTRATE DOES NOT RESPOND
(IF EQUIPPED WITH OPTIONAL HEART RATE KIT)

Malfunction	Probable Cause	Corrective Action
Heartrate system does not respond	Heartrate cable not connected	Check all electrical connections.
	Loose connection at Console	Secure connection at Console and Handlebar.
	User may have an unusual heart condition	Have different people try Transmitter (chest) strap.
	Faulty Transmitter and Receiver (Heartrate kit)	Replace Transmitter and Receiver (Heartrate kit).
	Faulty Display Console	Replace Display Console.
	Outside noise (Cross talk)	Move unit to another location.

NOTES:

DIAGNOSTIC TESTS

PURPOSE:

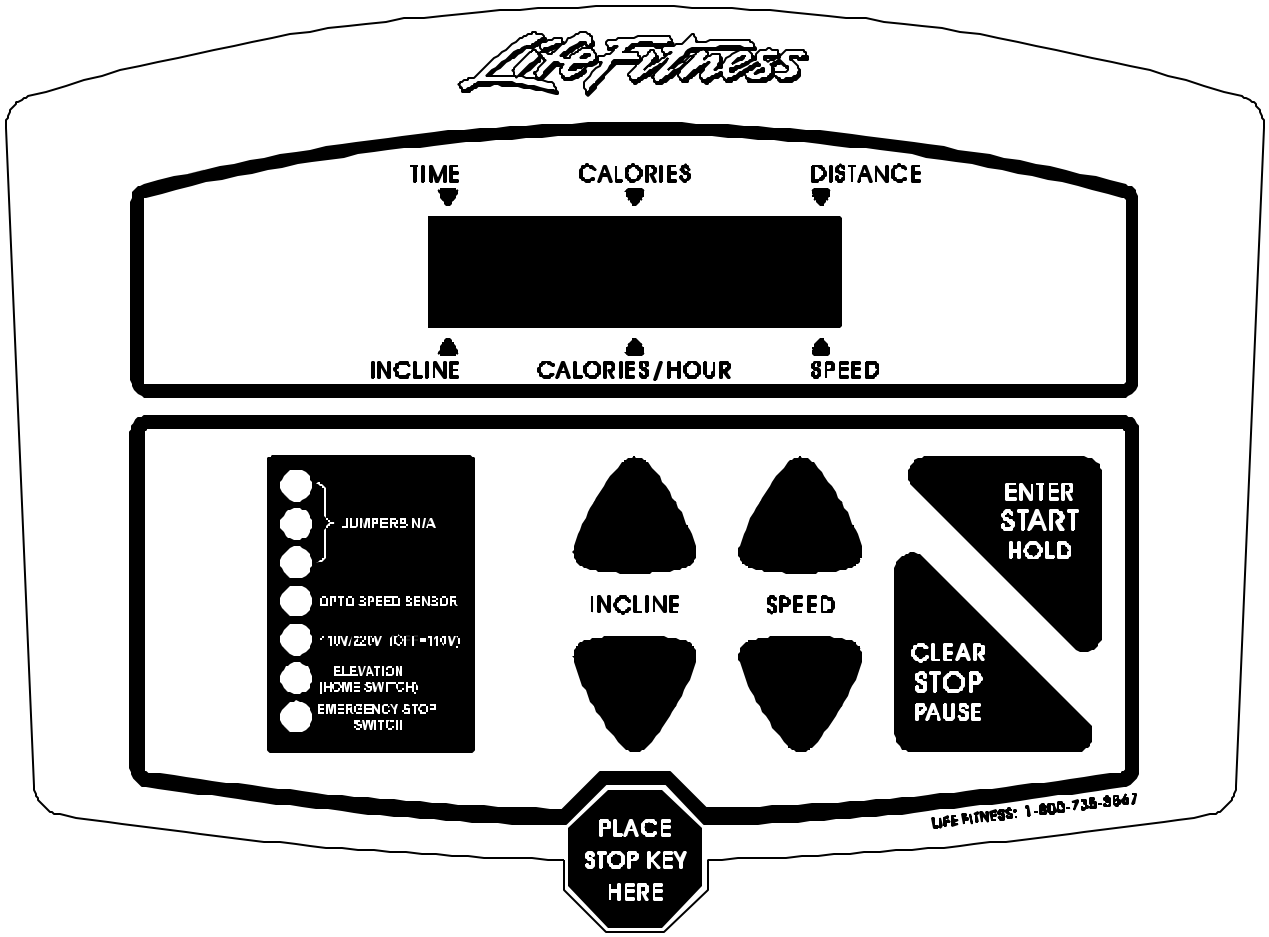
This Section describes the test procedures for the Life Fitness 3500 Treadmill Display Console Board including the Heart Rate feature (operational only if equipped with the optional Heart Rate Kit Tray).

SCOPE:

Diagnostic procedures will test the Display Console Board as used in the final Treadmill assembly. These procedures will insure proper functioning of the Console LED's, Keys and Displays as well as identify the Console version.

PROCEDURE:

Begin with the Treadmill turned OFF. Hold the designated key during power up to enter into the chosen Diagnostic Menu.



Continued

DIAGNOSTIC TESTS (Continued)

THE **SPEED DOWN KEY** ♦ IS USED FOR THE FOLLOWING TESTING INFORMATION:

- ⇒ ***CHECK THE DISPLAY/KEYPAD FUNCTIONS***
- ⇒ ***REVIEW STATISTICS***
- ⇒ ***IDENTIFY SOFTWARE VERSION***

USE THE **ENTER** KEY TO ADVANCE THROUGH THE TEST.

POWER UP THE UNIT WHILE HOLDING THE **SPEED DOWN** ♦ KEY. ALL LED's ON THE DISPLAY CONSOLE WILL LIGHT. PRESS **ENTER** ONCE AND THE CONSOLE WILL BEGIN TO SCROLL THROUGH LIGHTING LED's INDIVIDUALLY.

PRESS **ENTER** A SECOND TIME AND THIS WILL BRING YOU TO THE KEYPAD TEST. BY PRESSING EACH OF THE SIX KEYS, A PATTERN OF LED's WILL LIGHT. THIS VERIFIES THAT EACH OF THE KEYS IS RESPONDING AS INTENDED.

PRESS **ENTER** A THIRD TIME AND THE WORD "**STATS**" WILL APPEAR IN THE DISPLAY READOUT. PRESSING THE **SPEED** ♦ KEY WILL SCROLL YOU THROUGH THE INDIVIDUAL STATISTICS. (TO SCROLL BACK THROUGH THE STATISTICS, PRESS THE **SPEED** ♦ KEY).

1ST PRESS	**DISTANCE** LED LIT: MILES (IN HUNDREDS)
2ND PRESS	**TIME** LED LIT: MOTOR ON TIME (IN SECONDS)
3RD PRESS	**INCLINE** LED LIT: LIFT MOTOR RUN TIME (1/8 OF A SECOND)
4TH PRESS	**CAL/HR** LED LIT: PERCENTAGE OF ELEVATION AND TIME (percentage of elevation usage)
5TH PRESS	**SPEED** LED LIT: CURRENT LIMITER ACTIVATION

PRESS **ENTER** A FOURTH TIME AND THIS WILL GIVE YOU THE SOFTWARE VERSION OF THE TREADMILL. FOR EXAMPLE, THE DISPLAY READS **1. 5EE1** TRANSLATES TO:

1. 5	SOFTWARE VERSION
E	ENGLISH MEASUREMENT (MILES)
E	ENGLISH LANGUAGE
1	120V

PRESS **ENTER** A FIFTH TIME AND "**UNITS**" APPEARS IN THE DISPLAY READOUT. PRESSING THE **SPEED** D KEY WILL CHANGE THE UNIT OF MEASURE FROM ENGLISH TO METRIC (CODE VERSION 1.3 OR GREATER).

PRESS **ENTER** A SIXTH TIME AND "**LANG**" APPEARS IN THE DISPLAY READOUT. PRESSING THE **SPEED** D KEY ENABLES YOU TO CHANGE FROM ENGLISH TO A FOREIGN LANGUAGE (CODE VERSION 1.3 OR GREATER).

YOU CAN GO BACK TO THE START AT ANY TIME IN THIS TEST MODE BY PRESSING THE **CLEAR/PAUSE** KEY.

Continued

DIAGNOSTIC TESTS (Continued)

THE **INCLINE DOWN ♦ KEY** IS USED FOR THE FOLLOWING TESTING INFORMATION:

- ⇒ ***ELEVATION TEST/ HOME SWITCH***
- ⇒ ***SPEED MODE OPERATION***
- ⇒ ***HEARTRATE MODE OPERATION (IF EQUIPPED WITH OPTIONAL HEART RATE KIT)***

POWER UP THE UNIT WHILE HOLDING DOWN THE **INCLINE DOWN ♦ KEY**. THE DISPLAY CONSOLE WILL READ **TEST MODE**. UPON INITIAL ENTRY INTO THE TEST MODE, THE LEFT COLUMN OF THE PROGRAM PROFILE WINDOW WILL HAVE ONE TO TWO LED's LIT.

THE FIRST THREE LED's (FROM THE TOP) OF THE LEFT COLUMN ARE RELATED TO JUMPERS WHICH ARE NOT APPLICABLE TO ANY OF THE TEST MODES.

THE FOURTH LED FROM THE TOP INDICATES THE CONDITION OF THE **OPTO SPEED SENSOR**. WHEN LIT, THE **OPTO SPEED SENSOR** IS READING THROUGH A SLOT IN THE CHOPPER WHEEL THAT IS MOUNTED ON THE MOTOR. WHEN THE LED IS OFF, THE **OPTO SPEED SENSOR** IS BEING BLOCKED BY A SLOT ON THE CHOPPER WHEEL. NORMAL FUNCTION OF THE LED IS THAT IT FLASHES ON AND OFF AS THE DRIVE MOTOR TURNS DURING OPERATION.

THE FIFTH LED FROM THE TOP WILL INFORM YOU IF THE UNIT IS A 120V OR A 220V UNIT. WHEN THE LED IS OFF, THE UNIT IS 110V. WHEN THE LED IS ON, THE UNIT IS 220V.

THE SIXTH LED FROM THE TOP INDICATES THE ELEVATION (**HOME SWITCH**). WHEN THE LED IS OFF, THE **HOME SWITCH** IS ENGAGED AND THE UNIT IS AT ZERO ELEVATION. WHEN THE LED IS LIT, THE **HOME SWITCH** IS DISENGAGED AND THE UNIT IS AT A NON-ZERO ELEVATION.

THE BOTTOM LED IS THE **EMERGENCY STOP SWITCH** CONDITION. WHEN LED IS LIT, THE **EMERGENCY STOP SWITCH** IS ENGAGED AND THE UNIT OPERATES. WHEN THE LED IS OFF, THE **EMERGENCY STOP SWITCH** IS DISENGAGED AND THE UNIT WILL NOT RUN.

TO **TEST THE ELEVATION**:

CODE VERSION 1.7 OR LESS:
PRESS THE **INCLINE UP** ♦ KEY TWICE TO SET THE DISPLAY AT 1%. THE UNIT WILL INCLINE UNTIL THE INTERNAL UP LIMIT SWITCH IS ACTIVATED. THE UNIT WILL STOP, OR HOLD ITS' ELEVATION, AT ANY POINT IN THE INCLINE BY PRESSING THE **INCLINE DOWN ♦** KEY AND SETTING THE DISPLAY AT 0.5%. PRESSING THE **INCLINE DOWN ♦** AND SETTING THE DISPLAY TO 0% WILL LOWER THE INCLINE UNTIL THE INTERNAL LIMIT SWITCH IS ACTIVATED.

CODE VERSION 1.8 OR GREATER:
PRESS THE **INCLINE UP** ♦ KEY TO ELEVATE THE TREADMILL. PRESS THE **INCLINE DOWN ♦** KEY TO LOWER THE UNIT. A BEEPING WILL OCCUR WHILE THE UNIT IS BEING LOWERED AND THE HOME SWITCH IS ACTIVATED.

TO COMPLETELY LOWER THE ELEVATION, SET THE INCLINE TO 0%. THE UNIT WILL CONTINUE TO LOWER ITS ELEVATION UNTIL THE HOME SWITCH OR INTERNAL LIMIT SWITCH IS ENGAGED.

Continued

DIAGNOSTIC MODE ENTRY (Continued)

SPEED MODE

PRESS ANY SPEED KEY TO ENTER THE SPEED MODE. THE DISPLAY WILL PRESENT TWO NUMBERS. THE LEFT SIDE NUMBER REPRESENTS THE ACTUAL SPEED. THE RIGHT SIDE NUMBER REPRESENTS THE RELATIVE POWER APPLIED TO THE MOTOR. THE UNIT WILL SUPPLY A FIXED AMOUNT OF POWER TO THE DRIVE MOTOR IN THE SPEED MODE.

HEART RATE MODE (IF EQUIPPED WITH OPTIONAL HEART RATE KIT)

THE USER MUST HAVE THE HEART RATE TRANSMITTER AND RECEIVER ATTACHED IN THEIR PROPER POSITIONS FOR THE HEART RATE TO DISPLAY. BY PRESSING **ENTER**, THE USERS HEART RATE WILL APPEAR ON THE DISPLAY'S READOUT.

INCLINE UP ♦ KEY

POWER UP THE UNIT WHILE HOLDING DOWN THE **INCLINE ♦ UP** KEY.

NOTE: DO NOT STAND ON THE STRIDING BELT DURING POWER UP.

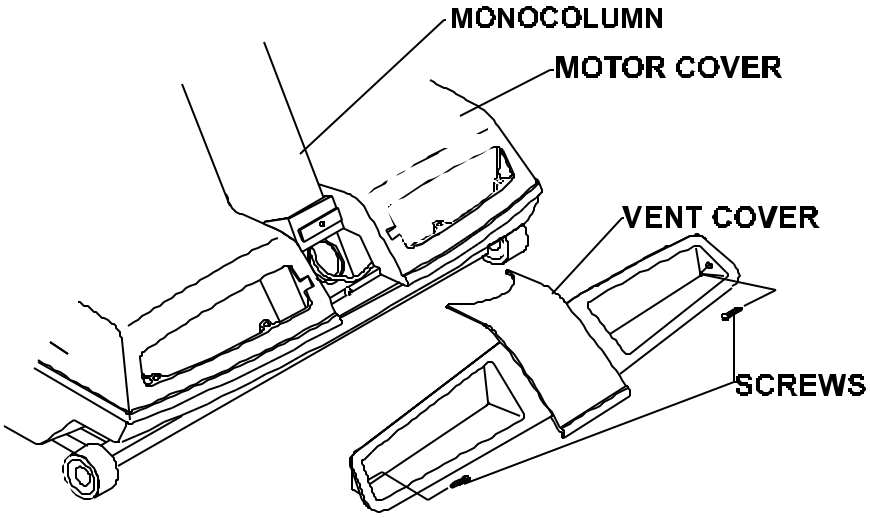
THE STRIDING BELT WILL BEGIN TO MOVE AT .5 MPH. GRASP THE HANDLEBAR AND BEGIN WALKING ON THE STRIDING BELT. WALK FORWARD TAKING THE SMALLEST STEPS POSSIBLE. THIS TEST WILL INDICATE THE POWER DRAW ON THE TREADMILL. THE AVERAGE AMOUNT IS 8 TO 12 AND WILL VARY ACCORDING TO THE TECHNICIANS WEIGHT. EXCESSIVELY HIGH NUMBERS INDICATE A NEWER, NON-BROKEN IN STRIDING BELT OR A VERY OLD, WORN BELT.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE VENT COVER

Tools Required: Phillips Screwdriver

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.



Step 2
Use a phillips screwdriver to remove the two SCREWS securing the sides of the VENT COVER to the MOTOR COVER.

Step 3
Grasp the VENT COVER in the center and pull away from the MOTOR COVER to disengage the two snap down CLIPS located on the inside, center of the VENT COVER.

Step 4
Position the new VENT COVER into place and reverse steps **1** through **3** to return all parts to their proper locations.

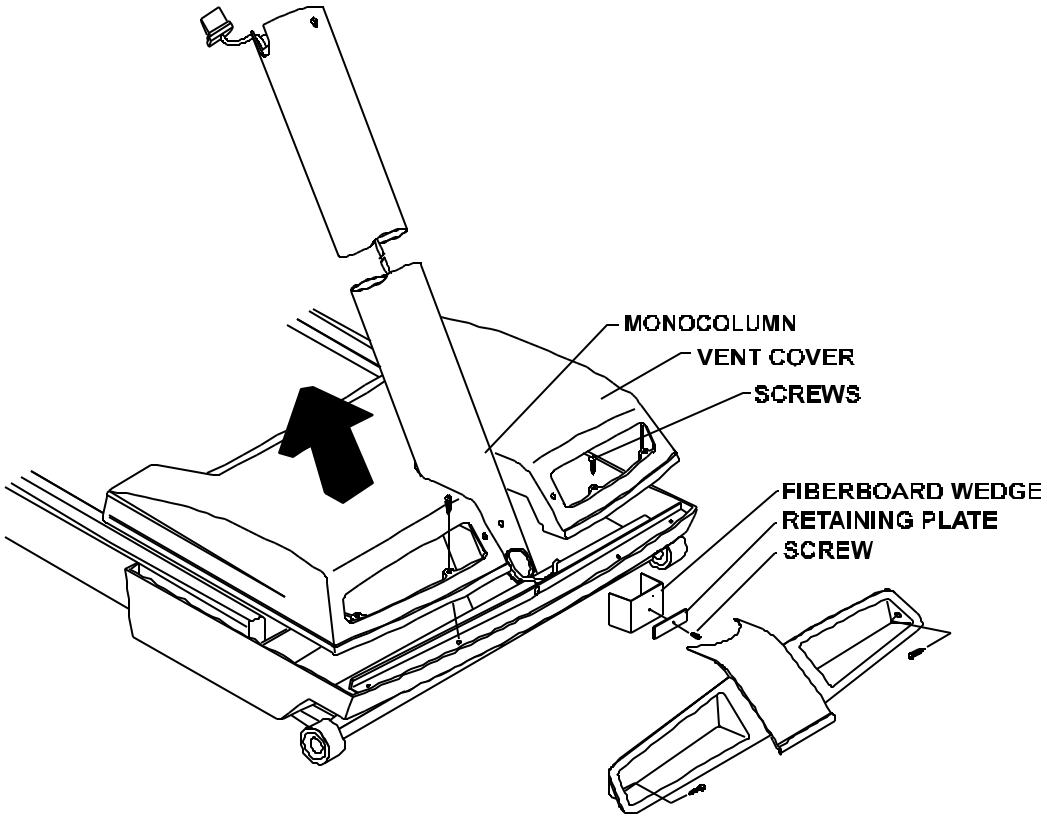
Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE MOTOR COVER

Tools Required: Phillips Screwdriver, hex key wrench set

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the VENT COVER (See “How To...”).



Step 3
Use a phillips screwdriver to remove the SCREW securing the RETAINING PLATE and FIBERBOARD WEDGE in place on the MONOCOLUMN.

Step 4
Remove the four SCREWS securing the MOTOR COVER in place against the Treadmill FRAME. Lift the MOTOR COVER from the machine.

Step 5
Place the new MOTOR COVER in position and reverse Steps **1** through 4 to return all parts to their proper locations.

Life Fitness Model 3500 Treadmill

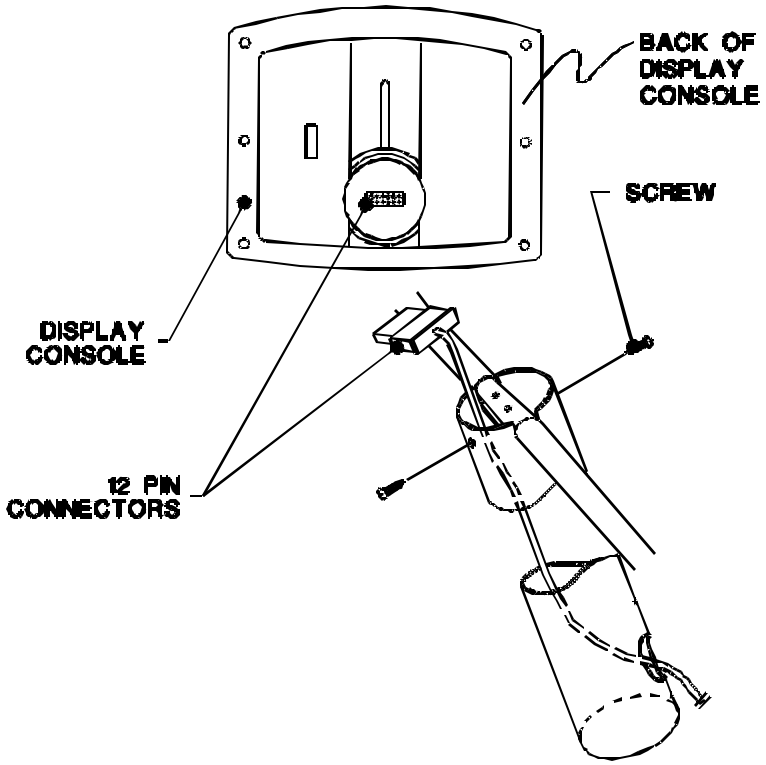
How To ... REMOVE AND REPLACE THE DISPLAY CONSOLE

Tools Required: Phillips Screwdriver

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the TRAY, if equipped with the optional HEART RATE kit. (See “How To...”).

Step 3
Use a phillips screwdriver to remove the two SCREWS securing the extended neck of the DISPLAY CONSOLE to the front and back of the MONOCOLUMN.



Step 4
Carefully lift the worn DISPLAY CONSOLE up from the MONOCOLUMN and unplug the 12-PIN CONNECTOR of the WIRE HARNESS from the back of the DISPLAY CONSOLE.

Step 5
Plug the 12-PIN CONNECTOR of the WIRE HARNESS protruding from the top of the MONOCOLUMN into the corresponding PC BOARD CONNECTOR located on the back of the new DISPLAY CONSOLE. Once connected, feed the excess CABLE of the WIRE HARNESS back into the top of the MONOCOLUMN and lower the DISPLAY CONSOLE into position on the MONOCOLUMN. Secure the extended neck of the DISPLAY CONSOLE to the front and back of the MONOCOLUMN with the two SCREWS**.**

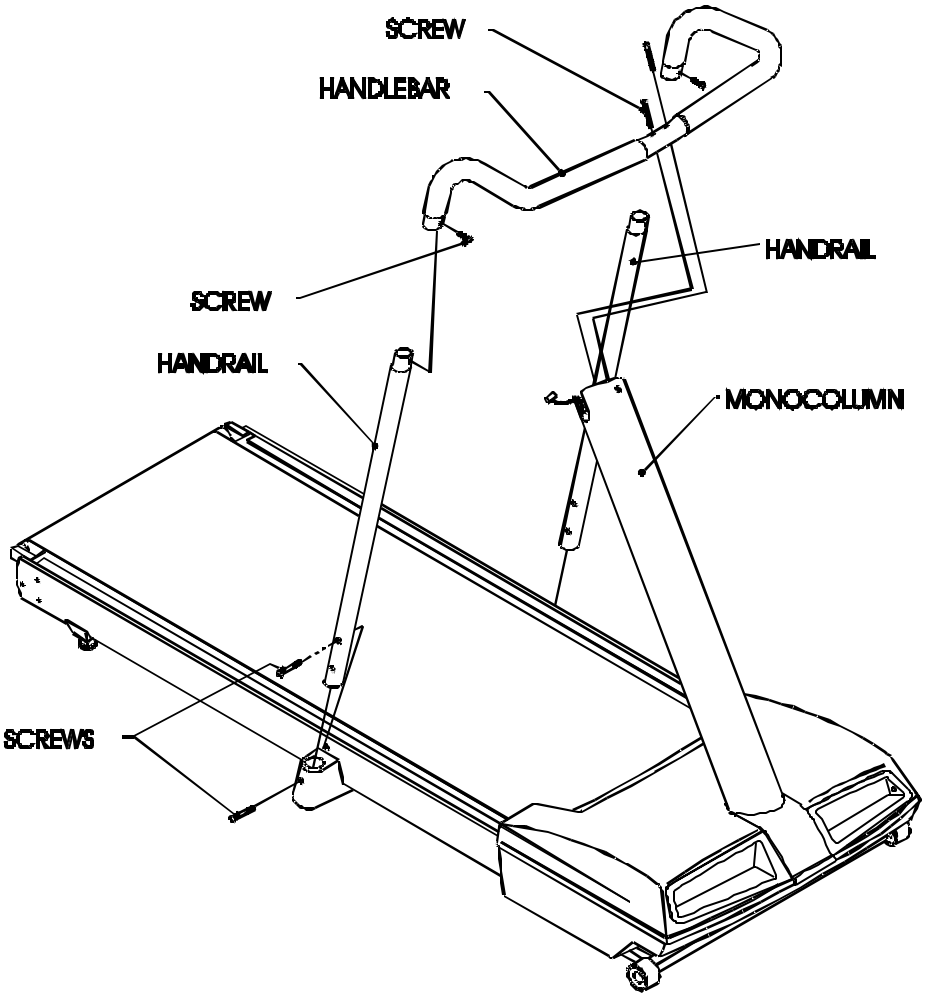
Step 6
Plug the unit into an electrical outlet and turn the power **ON** at the ON/OFF switch to resume operation.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE HANDLEBAR AND HANDRAILS

Tools Required: Phillips Screwdriver, hex key wrench set

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.
Step 2
Remove the DISPLAY CONSOLE. (See “How To...”).

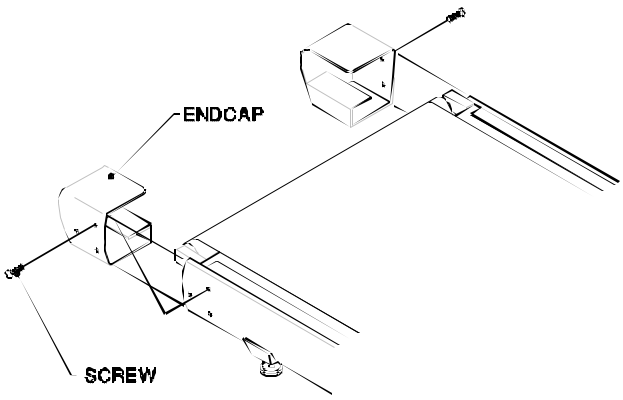


Step 3
Remove the two HEX KEY SCREWS securing the center of the foam padded HANDLEBAR to the top of the MONOCOLUMN.
Step 4
Loosen and remove the 2” (top) and the 2-1/2” (bottom) SCREWS securing the base of each of the two VERTICAL POSTS to the FOOT BRACKETS located on either side of the treadmill.
Step 5
Lift the entire HANDLEBAR/HANDRAIL ASSEMBLY away from the machine and set it down on the floor. Remove the SCREW securing each of the two VERTICAL POSTS to the foam padded HANDLEBARS and slide the POSTS from the HANDLEBARS.
Step 6
Replace the VERTICAL POST(S) or HANDLEBAR as desired and reverse Steps 1 through 5 to return all parts to their proper positions.

How To ... REMOVE AND REPLACE THE DECK AND STRIDING BELT

Tools Required: Phillips Screwdriver, socket set, hex key wrench set

IMPORTANT: THE DECK AND STRIDING BELT SHOULD ALWAYS BE REPLACED IN TANDEM. DO NOT REPLACE ONE WITHOUT THE OTHER.



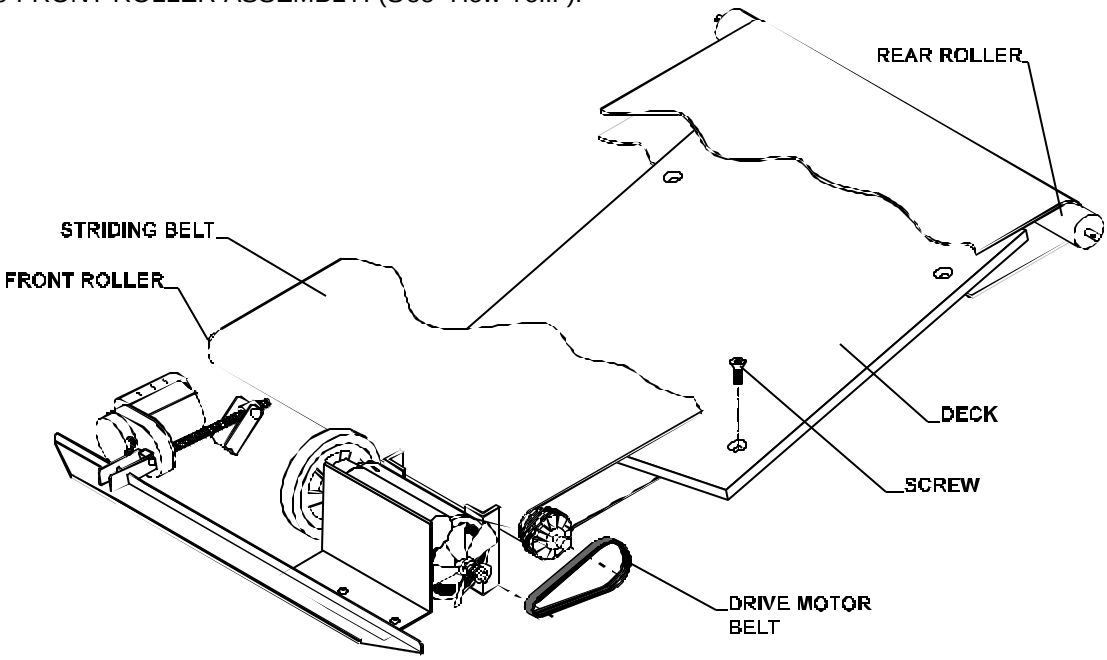
Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the MOTOR COVER. (See "How To...").

Step 3
Use a phillips screwdriver to remove the three SCREWS securing each of the END CAPS to the Treadmill FRAME. Remove the END CAPS and set aside.

Step 4
Remove the REAR ROLLER from the machine. (See "How To...").

Step 5
Remove the FRONT ROLLER ASSEMBLY. (See "How To...").



Step 6
Use a hex key wrench to loosen and remove the four SCREWS securing the top of the DECK to the FRAME ASSEMBLY.

Step 7
Remove the worn DECK and STRIDING BELT from the FRAME ASSEMBLY.

Step 8
Position a new DECK and STRIDING BELT in place and reverse Steps **1** through 6 to return all parts to their proper locations. Refer to "How to...ADJUST AND TENSION THE STRIDING BELT" for proper BELT tensioning instructions

NOTE: DO NOT OVERTIGHTEN THE TENSIONING BOLTS TO AVOID DAMAGE TO THE STRIDING BELT AND THE ROLLER BEARINGS.

Life Fitness Model 3500 Treadmill

How To... REMOVE AND REPLACE THE FRONT ROLLER ASSEMBLY

Tools Required: Phillips screwdriver, socket set, hex key wrench set

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

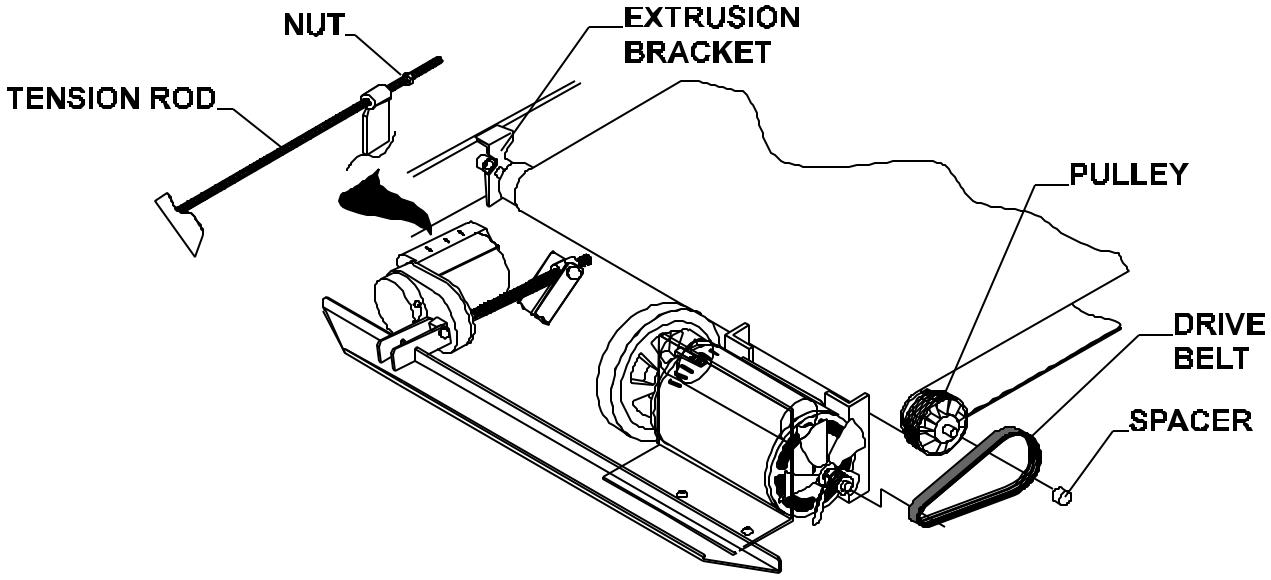
Step 2
Remove the MOTOR COVER. (See "How To...").

Step 3
It will now be necessary to relieve the tension on the STRIDING BELT by accessing the TENSIONING BOLTS from the rear ENDCAPS.

IMPORTANT: EACH ADJUSTMENT MADE TO ONE SIDE OF THE REAR ROLLER MUST BE MET WITH AN EQUAL ADJUSTMENT TO THE OTHER SIDE OF THE ROLLER TO MAINTAIN AN IDEAL BELT TENSION AT THE PIVOT POINT.

HELPFUL HINT: MARK THE POSITION OF THE REAR ROLLER ON THE INSIDE OF THE MOUNTING BRACKET TO LOCATE ITS ORIGINAL PLACEMENT. THIS WILL HELP WHEN RE-TENSIONING THE STRIDING BELT.

Use a hex key wrench to alternately turn the STRIDING BELT TENSIONING BOLTS 1/4 turn each, counter-clockwise until the STRIDING BELT is slackened enough to allow for removal of the FRONT ROLLER in the next Step.



Step 4
Slide the DRIVE MOTOR PULLEY BELT from the FRONT ROLLER ASSEMBLY PULLEY. Lift the worn FRONT ROLLER ASSEMBLY from the EXTRUSION BRACKETS and from within the STRIDING BELT to remove it from the unit.

Step 5
Locate the new FRONT ROLLER ASSEMBLY into position and reverse Steps **1** through 5 to return all parts to their proper locations.

Step 6
Refer to "How To...ADJUST AND TENSION THE STRIDING BELT" for proper BELT tensioning instructions.

How To ... REMOVE AND REPLACE THE REAR ROLLER

Tools Required Socket and ratchet set, hex key wrench set

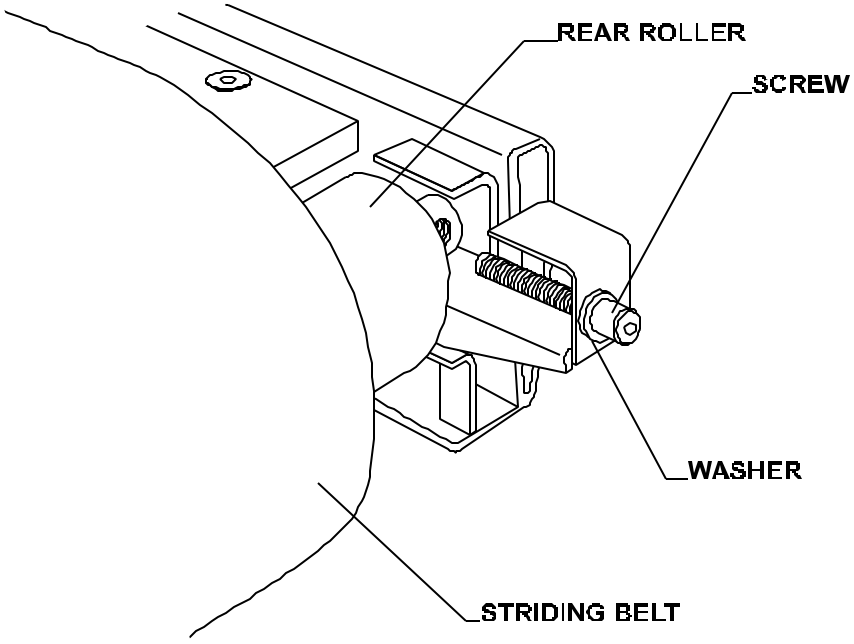
Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the MOTOR COVER. See "How To..."

Step 3
Use a phillips screwdriver to remove the three SCREWS securing each of the END CAPS to the FRAME and set the END CAPS aside.

Step 4
Use a hex key wrench to loosen and remove the TENSIONING SCREW and WASHER securing each side of the REAR ROLLER to the REAR ROLLER MOUNTING BRACKETS.

HELPFUL HINT: MARK THE POSITION OF THE REAR ROLLER ON THE INSIDE OF THE MOUNTING BRACKET TO LOCATE ITS ORIGINAL PLACEMENT. THIS WILL HELP WHEN RE-TENSIONING THE STRIDING BELT.



Step 5
Remove the worn REAR ROLLER from the machine.

Step 6
Position the new REAR ROLLER against the MOUNTING BRACKETS and use a hex key wrench to install the TENSIONING SCREWS and WASHERS by alternately turning the SCREWS clockwise an equal number of turns until the STRIDING BELT is snug, but not overstretched, against the REAR ROLLER.

IMPORTANT: EACH ADJUSTMENT MADE TO ONE SIDE OF THE REAR ROLLER SHOULD BE MET WITH AN EQUAL ADJUSTMENT TO THE OTHER SIDE OF THE ROLLER TO MAINTAIN AN IDEAL BELT TENSION AT THE CENTER PIVOT POINT OF THE ROLLER.

Step 7
Reverse Steps 1 through 3 to return all parts to their proper positions and refer to "How To...ADJUST AND TENSION THE STRIDING BELT" for proper BELT tensioning instructions.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE HEATSINK CONTROL BOARD ASSEMBLY

Tools Required: Phillips Screwdriver, socket and ratchet set, hex key wrench set

WARNING: FAILURE TO OBSERVE SAFE PROCEDURES WHEN SERVICING THIS UNIT COULD RESULT IN INJURY FROM ELECTRICAL SHOCK

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

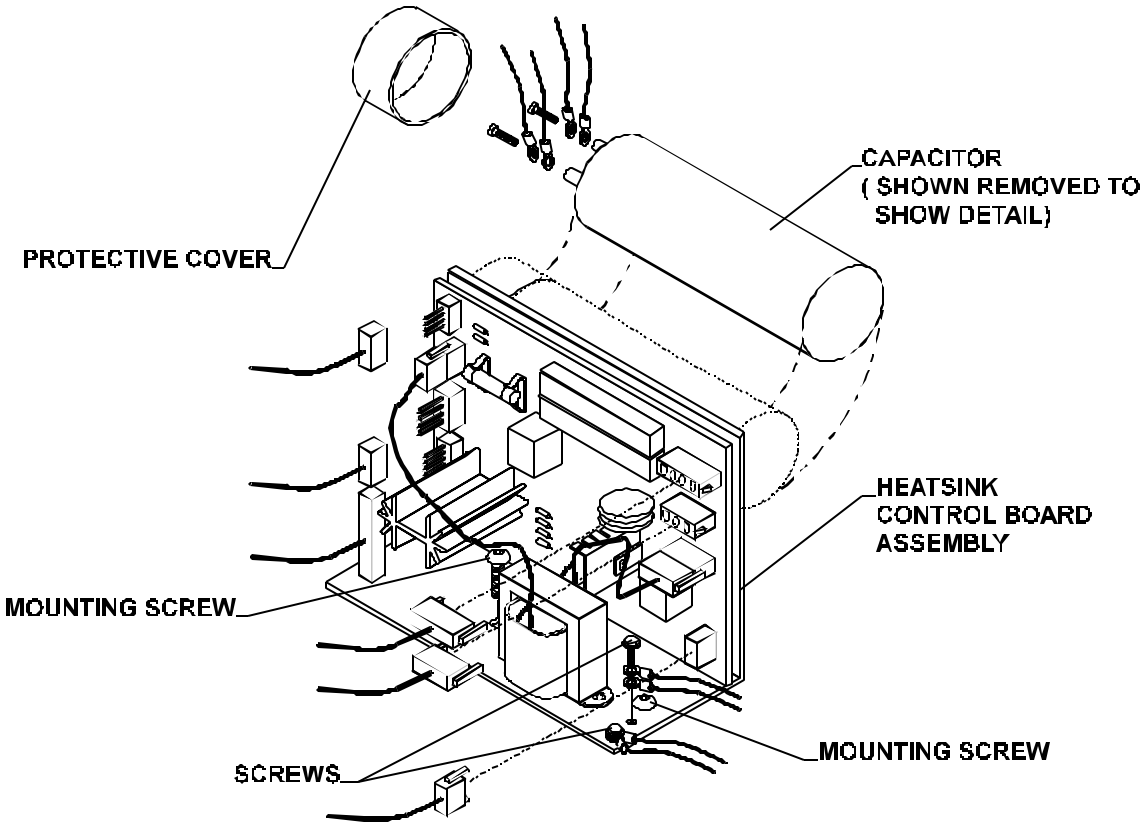
Step 2
Remove the VENT COVER. (See "How To...").

Step 3
Remove the MOTOR COVER. (See "How To...").

Step 4
Ground yourself to the machine by positioning an ANTI-STATIC GROUNDING STRAP around your wrist and attaching the other end (alligator clip) to a MOUNTING SCREW, or a connecting GROUND WIRE SCREW.

Step 5
Unplug the six CONNECTORS shown in the illustration from the HEATSINK CONTROL BOARD ASSEMBLY.

NOTE: TAKE A MOMENT TO NOTE THE LOCATIONS OF THE CONNECTORS PRIOR TO UNPLUGGING THEM FROM THE CONTROL BOARD.



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How To ... REMOVE AND REPLACE THE HEATSINK CONTROL BOARD ASSEMBLY (Continued)

Step 6
Use a socket wrench to loosen and remove the two SCREWS securing the GROUNDING WIRES to the HEATSINK CONTROL BOARD ASSEMBLY.

Step 7
Lift off the PROTECTIVE COVER from the top of the CAPACITOR. Remove the POSITIVE and NEGATIVE WIRE CONNECTORS leading from the DRIVE MOTOR ASSEMBLY to the CAPACITOR.

NOTE: THE CAPACITOR IS POLARIZED (+ RED, - BLACK).

Step 8
Remove the two MOUNTING SCREWS securing the HEATSINK CONTROL BOARD ASSEMBLY to the MOTOR PAN.

Step 9
Carefully lift the malfunctioning HEATSINK CONTROL BOARD ASSEMBLY from the machine and set aside.

Step 10
Place the new HEATSINK CONTROL BOARD ASSEMBLY into position and reverse Steps 1 through 8 to return all parts to their proper locations.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE DISPLAY WIRE HARNESS

Tools Required: Phillips Screwdriver, socket and ratchet set, hex key wrench set

WARNING: FAILURE TO OBSERVE SAFE PROCEDURES WHEN SERVICING THIS UNIT COULD RESULT IN INJURY FROM ELECTRICAL SHOCK

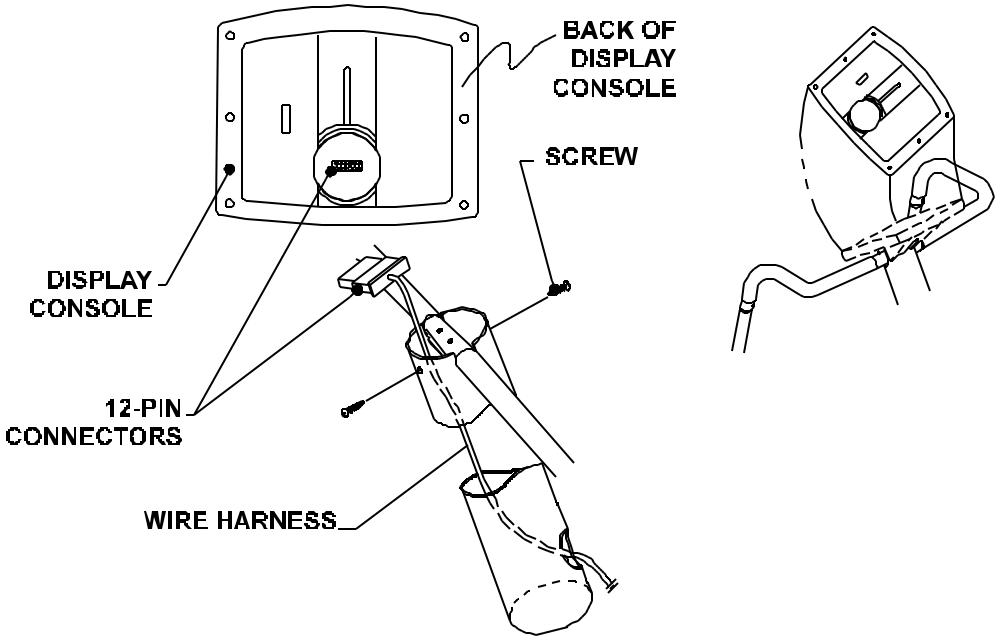
Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the VENT COVER. (See "How To...").

Step 3
Remove the MOTOR COVER. (See "How To...").

Step 4
Remove the TRAY if equipped with the optional HEART RATE KIT. (See "How To...").

Step 5
Remove the Display Console. (See "How To...").



Step 6
Ground yourself to the machine by positioning an ANTI-STATIC GROUNDING STRAP around your wrist and attaching the other end (alligator clip) to a MOUNTING SCREW, or a connecting GROUND WIRE SCREW.

Step 7
Tuck the 12-PIN CONNECTOR, which was disconnected from the DISPLAY CONSOLE, into the top of the MONOCOLUMN. Withdraw the DISPLAY WIRE HARNESS from the MONOCOLUMN through the large hole at the base of the MONOCOLUMN.

Step 8
Unplug the 12-PIN CONNECTOR from the HEATSINK CONTROLLER BOARD ASSEMBLY**.**

Step 9
Feed the new DISPLAY WIRE HARNESS through the MONOCOLUMN from the large hole at the base of the MONOCOLUMN until it exits toward the user side of the HANDLEBAR ASSEMBLY which crosses the top of the MONOCOLUMN..

NOTE: THE 12-PIN CONNECTOR OF THE DISPLAY WIRE HARNESS SHOULD EXIT THE TOP OF THE MONOCOLUMN ON THE USER SIDE OF THE HANDLEBAR CONNECTING BRACKET TO AVOID ANY WIRES BEING PINCHED OR DAMAGED BY THE DISPLAY CONSOLE UPON ASSEMBLY.

Step 10
Reverse Steps 1 through 8 to return all parts to their proper positions. Replace any WIRE TIES which may have been cut to insure the WIRE HARNESS is secure and will not be damaged by moving parts.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE LIFT ACTUATOR ASSEMBLY

Tools Required: Phillips screwdriver, standard screwdriver, hex key wrench set

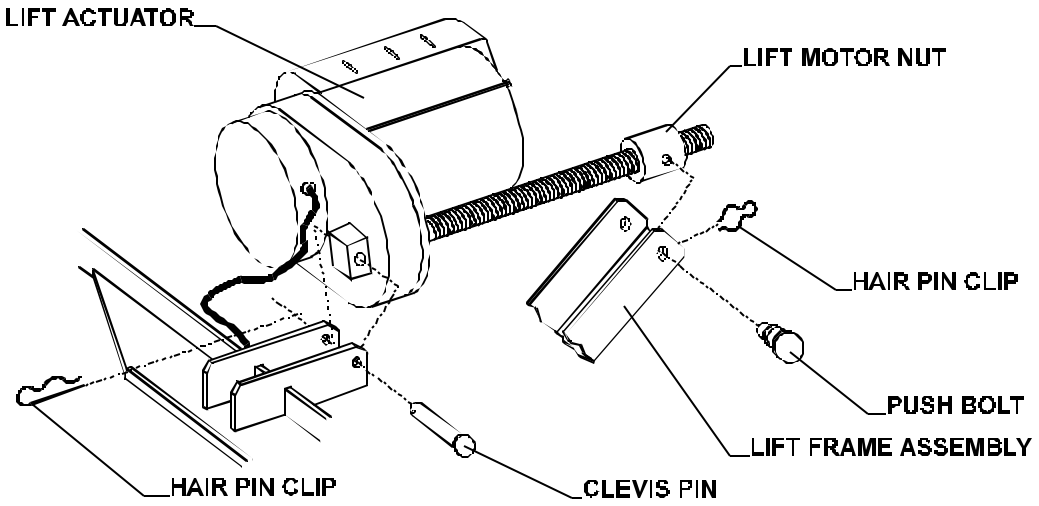
WARNING: FAILURE TO OBSERVE SAFE PROCEDURES WHEN SERVICING THIS UNIT COULD RESULT IN INJURY FROM ELECTRICAL SHOCK

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the VENT COVER. (See "How To...").

Step 3
Remove the MOTOR COVER. (See "How To...").

Step 4
Ground yourself to the machine by positioning an ANTI-STATIC GROUNDING STRAP around your wrist and attaching the other end (alligator clip) to a MOUNTING SCREW, or a connecting GROUND WIRE SCREW.



Step 5
Unplug the LIFT ACTUATOR (P4), from the HEATSINK CONTROLLER BOARD ASSEMBLY.

Step 6
Disconnect the large LIFT MOTOR NUT from the pins holding it to the LIFT FRAME ASSEMBLY by removing the two HAIR PIN CLIPS and PUSH BOLTS.

Step 7
Remove the HAIR PIN CLIP and CLEVIS PIN securing the unthreaded end of the LIFT ACTUATOR to the FRAME.

Step 8
Carefully lift the malfunctioning LIFT ACTUATOR and remove it from the machine.

Step 9
Position the new LIFT ACTUATOR ASSEMBLY in place and reverse Steps 1 through 7 to return all parts to their proper locations.

NOTE: BE CAREFUL TO ROUTE WIRES OF THE LIFT ACTUATOR IN A MANNER WHICH WILL AVOID PINCHING OR DAMAGE TO WIRES BY MOVING PARTS. USE WIRE TIES TO INSURE WIRES STAY SECURE.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE DRIVE MOTOR BELT

Tools Required: Phillips screwdriver, socket and ratchet set, hex key wrench set

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.

Step 2
Remove the VENT COVER. (See “How To...”).

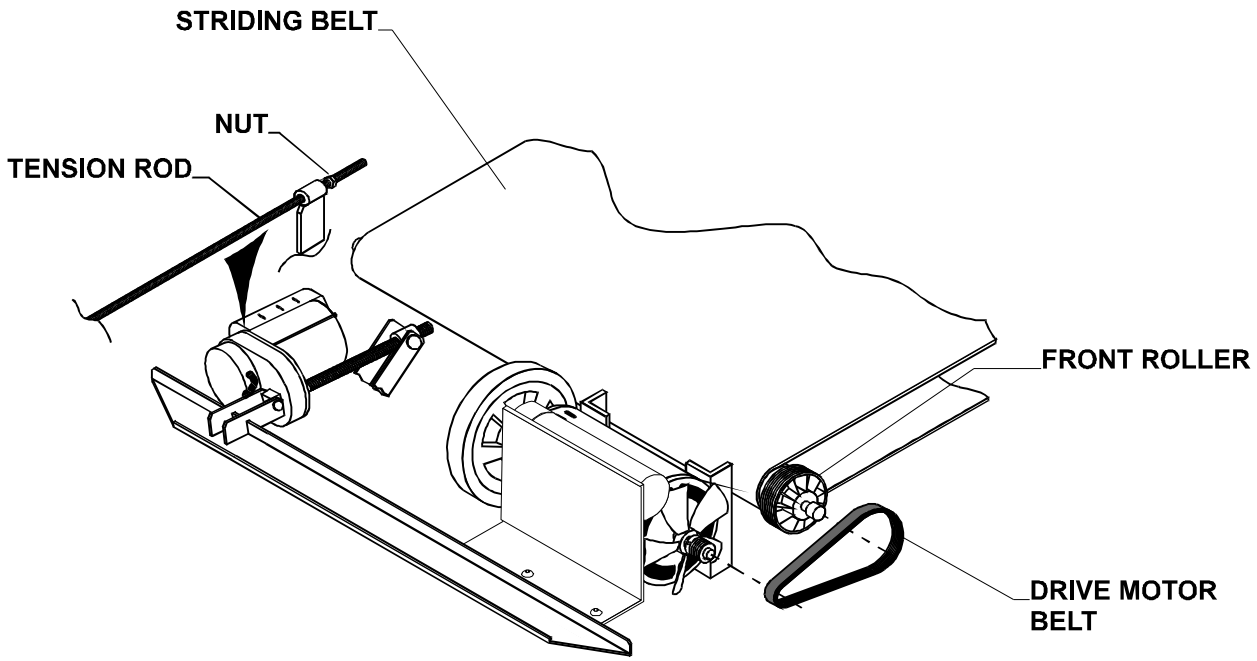
Step 3
Remove the MOTOR COVER. (See “How To...”).

Step 4
It will now be necessary to relieve the tension of the STRIDING BELT to allow removal of the DRIVE MOTOR BELT from the FRONT ROLLER.

HELPFUL HINT: REMOVE THE END CAPS AND MARK THE POSITION OF THE REAR ROLLER ON THE INSIDE OF THE MOUNTING BRACKET TO LOCATE ITS ORIGINAL PLACEMENT. THIS WILL HELP WHEN RE-TENSIONING THE STRIDING BELT.

Using a hex key wrench, ***ALTERNATELY*** loosen the two TENSIONING SCREWS and WASHERS securing each side of the REAR ROLLER to the REAR ROLLER MOUNTING BRACKETS an ***EQUAL*** number of times counter clockwise until the STRIDING BELT is slackened enough to allow for partial removal of the FRONT ROLLER.

IMPORTANT: EACH ADJUSTMENT MADE TO ONE SIDE OF THE REAR ROLLER SHOULD BE MET WITH AN EQUAL ADJUSTMENT TO THE OTHER SIDE OF THE REAR ROLLER TO MAINTAIN AN IDEAL STRIDING BELT TENSION AT THE CENTER PIVOT POINT OF THE REAR ROLLER UPON RE-TENSIONING.



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How To ... REMOVE AND REPLACE THE DRIVE MOTOR BELT (Continued)

Step 5
Lift the FRONT ROLLER ASSEMBLY from the EXTRUSION BRACKETS and position the FRONT ROLLER within the STRIDING BELT to allow for removal of the DRIVE MOTOR BELT from the DRIVE MOTOR and FRONT ROLLER PULLEYS.

Step 6
Position a new DRIVE MOTOR BELT over the DRIVE MOTOR and FRONT ROLLER PULLEYS taking note to properly align the ribs within the grooves of the PULLEYS. Relocate the FRONT ROLLER back into operating position.

Step 7
Use a hex key wrench to tighten the TENSIONING SCREWS and WASHERS at the REAR ROLLER by ***ALTERNATELY*** turning the SCREWS clockwise an ***EQUAL*** number of times each until the STRIDING BELT is snug, but not overstretched, against the REAR ROLLER.

Step 8
Check the tension of the DRIVE BELT using a BELT TENSIONING GUAGE. (Belt tension=100 lb+/-5 lb). The DRIVE BELT tension can be adjusted by loosening or tightening the LOCK NUT of the TENSIONING BOLT located next to the LIFT ACTUATOR.

Step 9
Reverse Steps 1 through 4 to return all parts to their proper positions and refer to “How To...ADJUST AND TENSION THE STRIDING BELT” for proper BELT tensioning instructions.

CHECKING THE DRIVE BELT PULLEY ALIGNMENT:

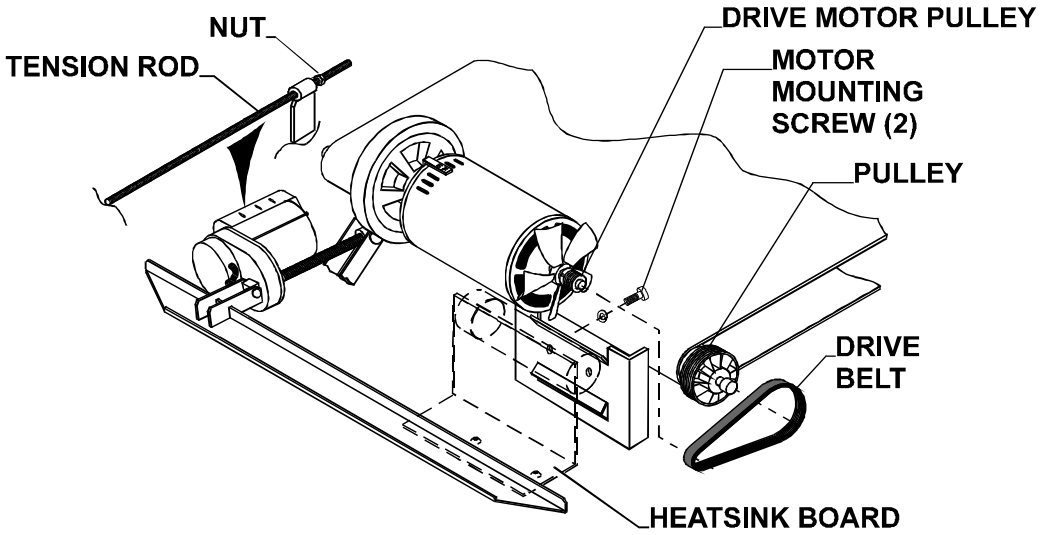
It is a good practice to check the alignment of the DRIVE MOTOR BELT PULLEY and the FRONT ROLLER PULLEY whenever servicing or replacing the DRIVE MOTOR BELT. With the power switch **OFF** and the machine unplugged from the electrical outlet, lay a straightedge flat against the outside of the FRONT ROLLER PULLEY and the DRIVE MOTOR PULLEY. The flat faces of the two PULLEYS should be in-line (coplanar). If the PULLEYS are not in-line, loosen the two DRIVE MOTOR PULLEY SET SCREWS and adjust the DRIVE MOTOR PULLEY on the MOTOR SHAFT accordingly. Tighten the SET SCREWS to secure the PULLEY into position.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE DRIVE MOTOR

Tools Required: Phillips screwdriver, socket and ratchet set, hex key wrench set

Step 1
Turn the power **OFF** at the ON/OFF switch and then unplug the unit from the electrical outlet.
Step 2
Remove the VENT COVER. (See “How To...”).
Step 3
Remove the MOTOR COVER. (See “How To...”).
Step 4
Cut the WIRE TIE that secures the three DRIVE MOTOR ASSEMBLY lead wires and the SENSOR CABLE at the MOTOR HOUSING. Note the location of this WIRE TIE for replacement later. Disconnect the three DRIVE MOTOR lead wires from the MOTOR TERMINALS. Note lead wire positions for reference during installation. (Orientation = Black, Green, Red, clockwise when facing FLYWHEEL).



Step 5
Detach the SENSOR CABLE from the black retaining clip (attached to the metal heat sink on the CONTROL BOARD ASSEMBLY). Disconnect the SENSOR CABLE CONNECTOR from the CONTROL BOARD. Note the orientation of the SENSOR CABLE CONNECTOR on the CONTROL BOARD for reference during installation.
Step 6
It will now be necessary to relieve the DRIVE MOTOR BELT tension by removing the LOCK NUT on the TENSIONING BOLT located next to the LIFT ACTUATOR.

NOTE: IF A BELT TENSIONING GUAGE IS NOT AVAILABLE, MARK THE CURRENT SETTING OF THE TENSIONING BOLT BY LOCATING A PIECE OF TAPE ON THE BOLT AGAINST THE BRACKET ON THE OPPOSITE SIDE OF THE LOCK NUT. ALSO, COUNT AND NOTE THE NUMBER OF TURNS REQUIRED TO REMOVE THE LOCK NUT. THIS WILL AID IN PROPERLY TENSIONING THE DRIVE BELT DURING INSTALLATION.

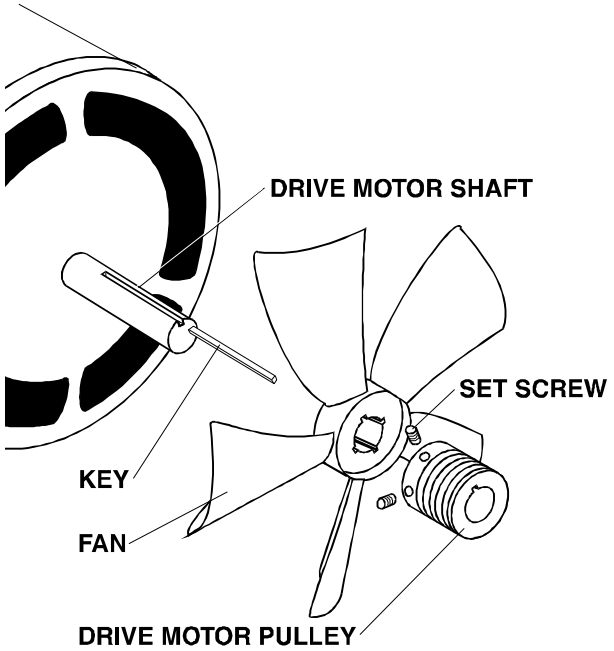
Remove the 1/4-20 nylon-insert LOCK NUT from the TENSIONING BOLT. Pivot the MOTOR MOUNTING BRACKET rearward and remove the DRIVE MOTOR BELT from the MOTOR PULLEY.

Continued

Step 7
Remove the two DRIVE MOTOR ASSEMBLY mounting SCREWS securing the ASSEMBLY to the MOTOR MOUNTING BRACKET by using a 1/4" hex wrench. Remove the DRIVE MOTOR ASSEMBLY from the unit. Pivoting the MOTOR MOUNTING BRACKET may be required to remove the ASSEMBLY.

Step 8
Align the new DRIVE MOTOR ASSEMBLY with the MOTOR MOUNTING BRACKET. Locate the new DRIVE MOTOR ASSEMBLY into position and secure IN PLACE with the two SCREWS. (Support the DRIVE MOTOR ASSEMBLY with one hand beneath it while inserting the SCREWS with the other hand). Install the DRIVE MOTOR BELT onto the DRIVE MOTOR PULLEY. Be sure the DRIVE BELT properly engages all ribs on both the DRIVE MOTOR and the FRONT ROLLER PULLEYS.

Step 9
Check that the SHAFT KEY located on the DRIVE MOTOR SHAFT is properly seated within one of the four KEY slots in the PLASTIC FAN and that the PLASTIC FAN rests against the shoulder in the MOTOR SHAFT. Reposition the SHAFT KEY and FAN as required if they are not properly aligned.



Step 10
Use a STRAIGHT-EDGE to align the flat sides of the DRIVE MOTOR PULLEY and the FRONT ROLLER PULLEY. The faces of the two PULLEYS should be in-line (coplanar). If the PULLEYS are not aligned, loosen the two SET SCREWS on the DRIVE MOTOR PULLEY and adjust as necessary. Once aligned, recheck the SHAFT KEY and PLASTIC FAN positions per Step 9 above and tighten the two DRIVE MOTOR PULLEY SET SCREWS.

Step 11
Install the 1/4-20 nylon-insert LOCK NUT onto the TENSIONING BOLT and, if available, use a belt tensioning gauge to tension the DRIVE MOTOR BELT to 100 lb (+/- 5 lb).

Step 12

NOTE: IF A GAUGE IS NOT AVAILABLE, RE-INSTALL THE LOCK NUT BY TURNING IT THE SAME NUMBER OF TIMES IT WAS TURNED ON REMOVAL. BE SURE THE TENSIONING BOLT IS POSITIONED PROPERLY IN THE SLOT AT THE FRONT OF THE MOTOR HOUSING DURING TENSIONING.

Connect the three DRIVE MOTOR lead wires to the proper DRIVE MOTOR TERMINALS (See Step 4). Attach the new SENSOR CABLE to the black retaining clip. Connect the SENSOR CABLE CONNECTOR to the CONTROL BOARD terminal. Install a new WIRE TIE to secure the SENSOR CABLE and the three DRIVE MOTOR LEAD WIRES in the same location from which the previous WIRE TIE was removed.

Step 13
Manually rotate the DRIVE MOTOR SHAFT. Check that all wiring is adequately dressed to clear rotating components. Redress wiring if required.

Step 14
Reverse Steps 1 through 3 to return all parts to their proper positions.

How To ... REMOVE AND REPLACE THE LIFESPRINGS

Tools Required: Phillips screwdriver, socket and ratchet set, hex key wrench set

Step 1
Turn the power **OFF** at the on/off switch and then unplug the unit from the electrical outlet.

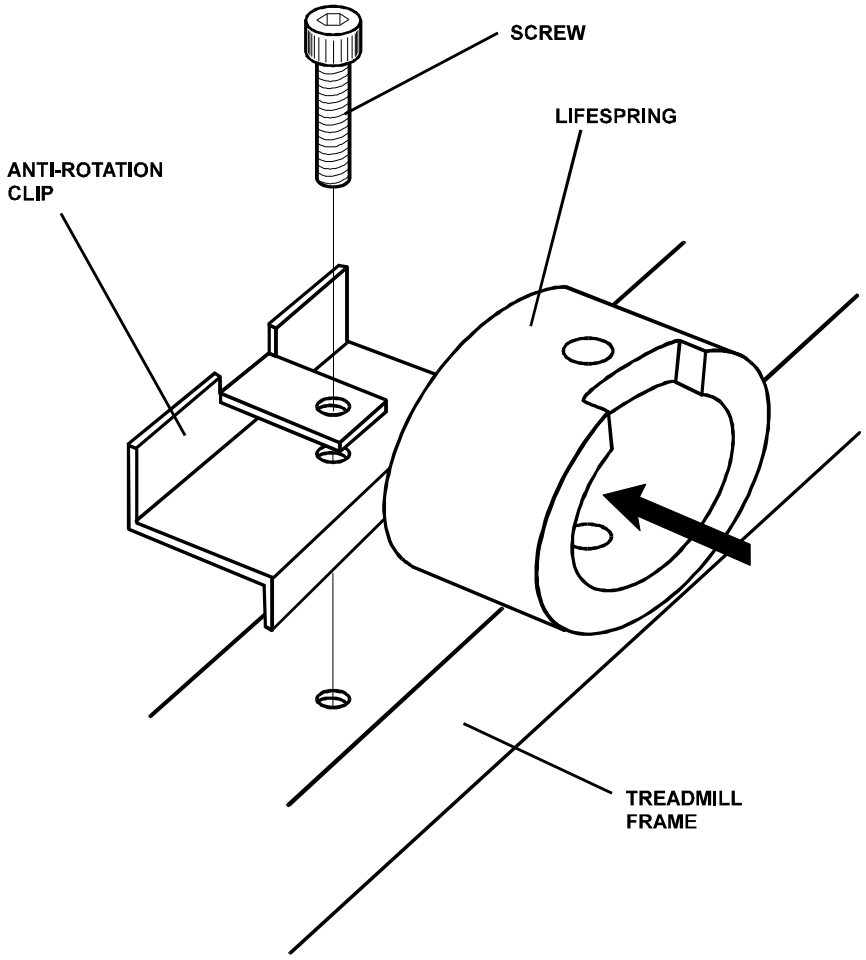
Step 2
Remove the MOTOR COVER. (See “How To...”).

Step 3
Remove the DECK and STRIDING BELT. (See “How To...”).

Step 4
Insert a hex key wrench into the access hole located on top of the LIFESPRING. Loosen and remove the SCREW through the access hole.

Step 5
Lift the entire LIFESPRING/ANTI-ROTATION CLIP ASSEMBLY from the machine. Slide the worn LIFESPRING out of the ANTI-ROTATION CLIP and replace with a new LIFESPRING.

Step 6
Reposition the LIFESPRING/ANTI-ROTATION CLIP ASSEMBLY in place taking note that the lower lip of the ANTI-ROTATION CLIP rests against the FRAME of the Treadmill. Secure the ASSEMBLY in place with the SCREW.



Step 7
Reverse Steps 1 through 3 to return all parts to their proper locations. Refer to “How To...Adjust and Tension the Striding Belt” for proper STRIDING BELT tensioning instructions.

Life Fitness Model 3500 Treadmill

How To ... REMOVE AND REPLACE THE TRAY (Optional Heart Rate Kit)

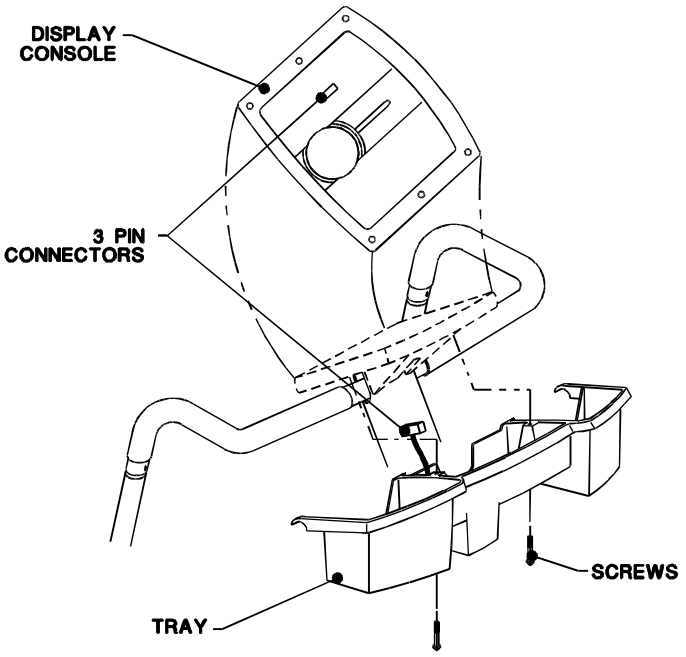
Tools Required: Phillips screwdriver

Step 1
Turn the power OFF by unplugging the unit at the electrical outlet.

Step 2
Remove the two SCREWS located on the underside of the TRAY which are securing the TRAY to the DISPLAY CONSOLE. Hold on to the TRAY during this procedure to prevent the TRAY from falling and possibly damaging the WIRE HARNESS.

Step 3
Swing the TRAY slowly away from the back of the DISPLAY CONSOLE while the extended arms of the TRAY continue to rest on the HANDLEBARS of the treadmill.

Step 4
Unplug the 3-PIN CONNECTOR of the Heart Rate Monitor Receiver HARNESS (located within the TRAY) from the matching 3-PIN CONNECTOR on the back of the DISPLAY CONSOLE.



Step 5
Swing the TRAY down while lifting the extended arms of the TRAY from the HANDLEBARS and remove from the machine. Reverse Steps 1 through 4 to replace the TRAY and restore all parts to their original positions.

Life Fitness Model 3500 Treadmill

How To... ADJUST AND TENSION THE STRIDING BELT

Tools Required: Hex key wrench set, phillips screwdriver

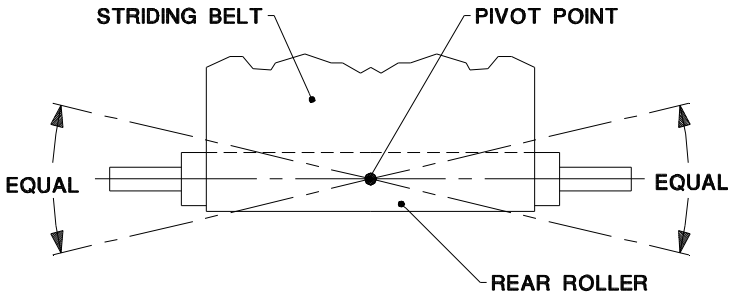
CAUTION: DO NOT MOVE OR PLACE YOUR HANDS UNDER THE UNIT WHILE THE MACHINE IS PLUGGED INTO AN ELECTRICAL OUTLET.

It is *EXTREMELY* important that the treadmill be correctly leveled prior to any tracking adjustments. An unstable unit may cause Striding Belt misalignment.

Tracking (Centering) an Existing or New Striding Belt

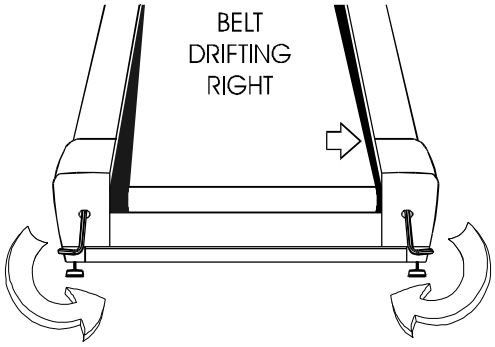
Step 1
Locate the two belt TENSIONING BOLTS on each side of the REAR ROLLER MOUNTING BRACKETS. The TENSIONING BOLTS are accessible from the holes provided in the ENDCAPS.

Step 2
Enter the Manual program and set the belt speed to run at 4.0 mph.

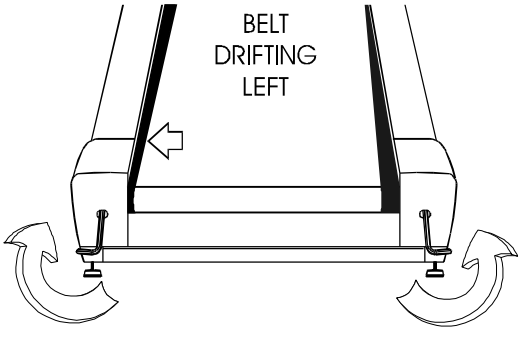


NOTE: EACH ADJUSTMENT MADE TO ONE SIDE OF THE REAR ROLLER MUST BE MET WITH AN EQUAL AND OPPOSITE ADJUSTMENT TO THE OTHER SIDE OF THE REAR ROLLER TO MAINTAIN AN IDEAL BELT TENSION AT THE PIVOT POINT.

CAUTION: DO NOT OVER TIGHTEN THE TENSIONING BOLTS WHILE MAKING BELT ADJUSTMENTS. OVER TIGHTENING OF BOLTS MAY OVER STRETCH AND DAMAGE THE STRIDING BELT AS WELL AS PLACE AN UNNECESSARY LOAD ON THE REAR ROLLER BEARINGS.



If the STRIDING BELT has moved to the **right**, turn the right TENSION BOLT 1/4 turn clock-wise and the left TENSION BOLT 1/4 turn counter-clockwise to start the STRIDING BELT tracking back to the center of the REAR ROLLER.



If the STRIDING BELT has moved to the **left**, turn the left TENSION BOLT 1/4 turn clock-wise and the right TENSION BOLT 1/4 turn counter-clockwise to start the STRIDING BELT tracking back to the center of the REAR ROLLER.

Continued

How To... ADJUST AND TENSION THE STRIDING BELT (Continued)

Tools Required: Hex key wrench set, phillips screwdriver

Step 3
Repeat adjustments until the STRIDING BELT appears centered. Allow the machine to continue running for several minutes to observe if the tracking remains stabilized.

CAUTION: DO NOT MOVE OR PLACE YOUR HANDS UNDER THE UNIT WHILE THE MACHINE IS PLUGGED INTO AN ELECTRICAL OUTLET.

It is *EXTREMELY* important that the treadmill be correctly leveled prior to any tracking adjustments. An unstable unit may cause Striding Belt misalignment.

Tensioning an Existing Striding Belt

Step 1
Locate the two BELT TENSIONING BOLTS on each side of the REAR ROLLER MOUNTING BRACKETS. The TENSIONING BOLTS are accessible from the holes provided in the ENDCAPS.

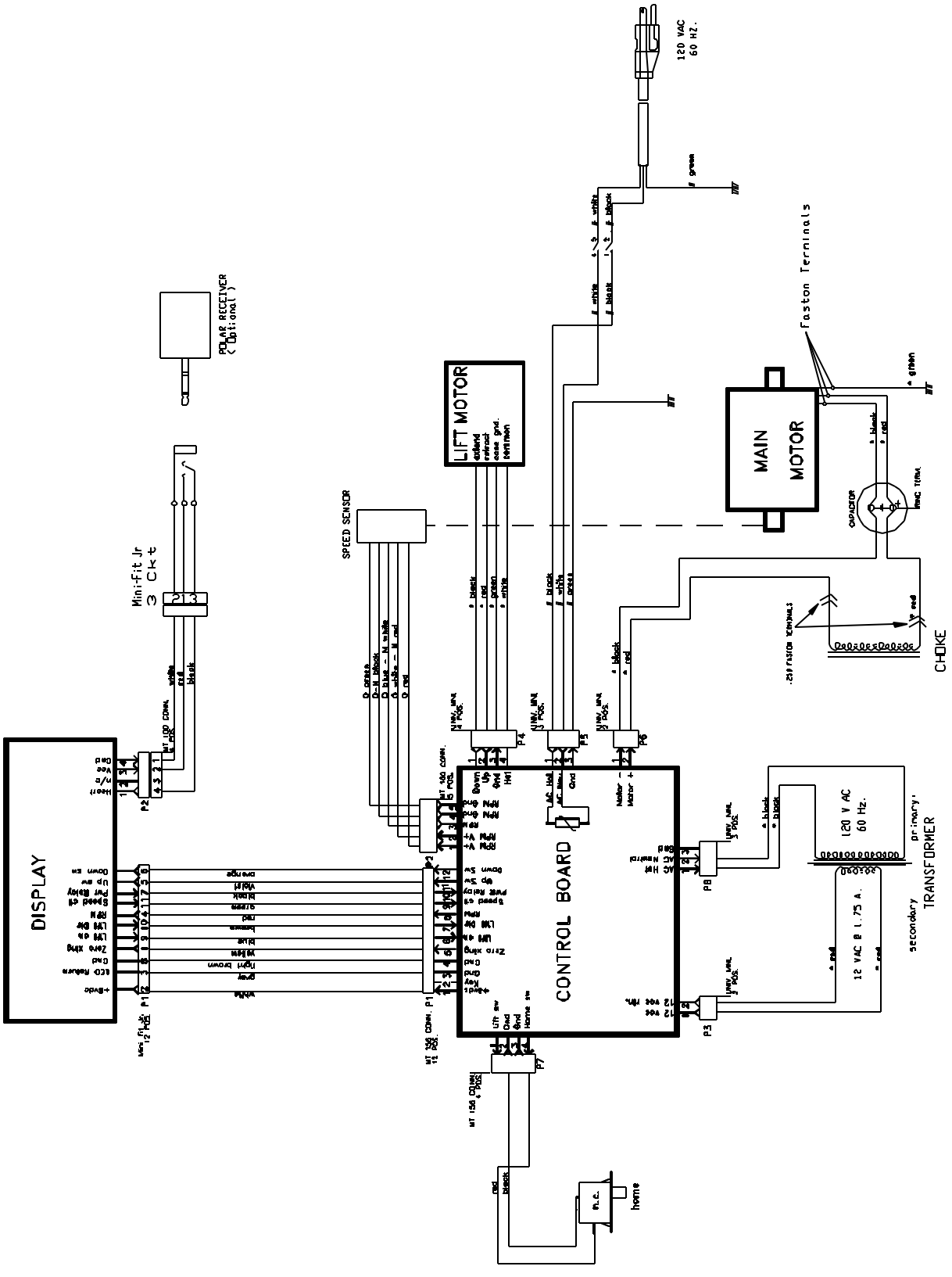
Step 2
Enter the Manual program and run unit for five minutes at 5.0 mph.***DO NOT*** run on the BELT.

Step 3
Using the speed decrease button ∇, bring the STRIDING BELT speed down to 2 mph. With the STRIDING BELT speed at 2 mph., tightly grasp the HANDRAILS and attempt to stall the STRIDING BELT. If the STRIDING BELT slips, continue to Step 4. if it does not slip, the tension is correct.

Step 4
Stop the treadmill and alternately turn the STRIDING BELT TENSIONING BOLTS 1/4 turn clock-wise to tension, ***NOT*** exceeding one full turn. (See **Tracking (Centering) an Existing or New Striding Belt** on previous page. Repeat Step 3.)

NOTES:

WIRING DIAGRAM



SECTION IV

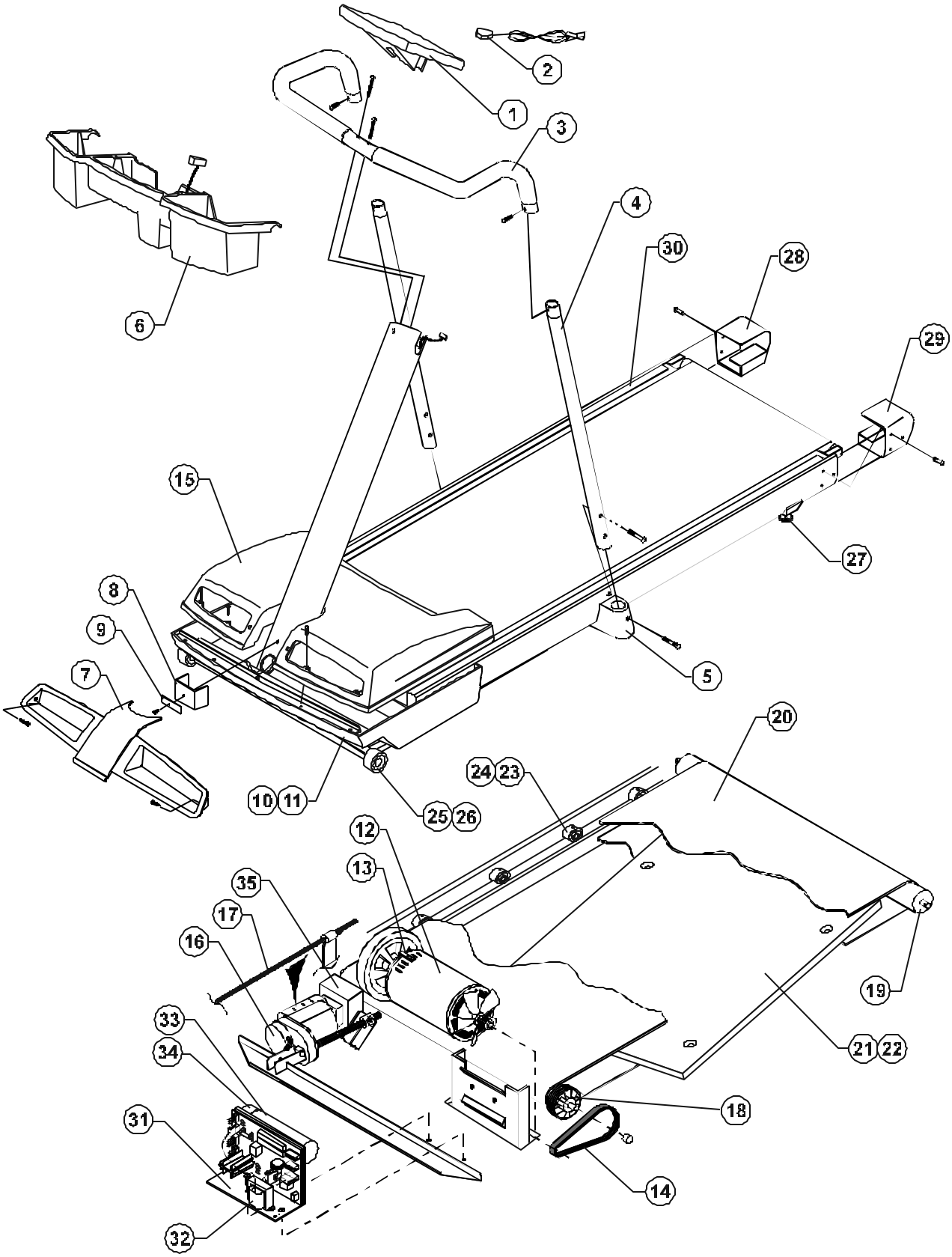
PARTS IDENTIFICATION

1	DISPLAY CONSOLE, ENG/ENG SERIAL NO. 840024-841699 SERIAL NO. 841700 AND ABOVE	 AK40-00011-0001 AK40-00049-0001
2	STOPKEY & CLIP ASSEMBLY	AK40-00035-0000
3	HANDLEBAR : W/ GRIPS	OK40-01092-0000
4	HANDRAIL VERTICAL TUBE	OK40-01006-0000
5	HANDRAIL MOUNT (PLASTIC)	OK40-01034-0000
6	HEART RATE KIT TRAY (OPTIONAL)	GK40-00002-0001
7	VENT COVER ASSEMBLY	AK40-00002-0001
8	PROTECTIVE WEDGE	OK40-01089-0000
9	RETAINER PLATE, WEDGE	OK40-01090-0000
10	ON/OFF SWITCH ASSEMBLY	AK40-00040-0000
11	LINE CORD	AK36-00013-0000
12	DRIVE MOTOR ASSEMBLY SERIAL NO. 840024-841699 SERIAL NO. 841700 AND ABOVE	 AK40-00021-0001 AK40-00051-0001
13	SPEED SENSOR W/ BRACKET ASSEMBLY	AK40-00031-0000
14	DRIVE MOTOR BELT (POLY-V)	OK40-01014-0000
15	MOTOR COVER ASSEMBLY (SHROUD)	AK40-00037-0001
16	LIFT ACTUATOR	OK40-01018-0000
17	ROD, DRIVE MOTOR BELT TENSIONING	OK40-01096-0000
18	FRONT ROLLER ASSEMBLY	AK40-00027-0000
19	REAR ROLLER	OK40-01013-0000
20	STRIDING BELT	OK36-01019-0004
21	DECK	OK40-01008-0000
22	BELT TRACKING GUIDES	OK36-01061-0000
23	LIFESPRING : TEC PECK	OK40-01026-0001
24	ANTI-ROTATION CLIP: LIFESPRING	OK40-01110-0000
25	WHEEL, LIFT LEGS	OK40-01021-0000
26	WHEEL CAP (PUSH-ON)	0017-00103-0197
27	LEG, LEVELER	0017-00009-0796
28	END CAP, RIGHT	OK40-01086-0001
29	END CAP, LEFT	OK40-01086-0002
30	EXTRUSION ASSEMBLY, VINYL	AK40-00026-0000
31	HEATSINK CONTROL BOARD	AK40-00033-0001
32	TRANSFORMER, DOM	0017-00003-0751
33	CAPACITOR, MOTOR (RUN)	118E-00001-0056
34	CAPACITOR CAP (RED)	0017-00042-0859
35	CHOKE	111E-00001-0014

THE FOLLOWING ITEMS ARE NOT SHOWN:

	DECAL : EXTR TR--3500	OK40-01114-0000
	DECAL : LOGO TR-3500	OK40-01022-0000
	PARTS BAG ASSEMBLY	AK40-00034-0000
	WARRANTY CARD	M051-00K40-A003
	CABLE ASSEMBLY : HOME-SWITCH	AK36-00025-0000
	CABLE ASSEMBLY : CHOKE-CONTROL	AK36-00016-0000
	CABLE ASSEMBLY : DISPLAY-CONSOLE	AK36-00017-0000
	CABLE ASSEMBLY : HR INTERFACE	AK36-00041-0000

PARTS IDENTIFICATION



COMMUNICATING BY FAX

If you would like to submit a parts order, or if you need help troubleshooting a problem, we have included, for your convenience, a FAX form on the following page. Simply make a copy (or copies) of the FAX sheet and fill in the necessary information. You may FAX us at any time, 24 hours a day, to either of the numbers shown. A Life Fitness service representative will process your order, or respond to your problem, as quickly as possible.

AFTER MARKET SERVICES

☐ **PARTS ORDER** *(IF BOTH PLEASE INDICATE)* **SALE** ☐

☐ **PRODUCT TROUBLESHOOTING** ☐ **WARRANTY**

NAME:	CUSTOMER NO:	DATE:
PHONE:	FAX:	CONTACT NAME:

METHOD OF SHIPMENT: ☐ **1 DAY** ☐ **2 DAY** ☐ **GROUND**

PARTS ORDER FORM

ITEM NO.	PART NUMBER	DESCRIPTION	QUANTITY
1			
2			
3			
4			
5			
6			

PRODUCT TROUBLESHOOTING

PRODUCT NAME:	SERIAL NO.
DETAILED DESCRIPTION OF PROBLEM:	
PRODUCT NAME:	SERIAL NO.
DETAILED DESCRIPTION OF PROBLEM:	

TIME RECEIVED:	TIME COMPLETED:	TECHNICIAN NAME:

Life Fitness Model 3500 Treadmill

NOTES: